[0070] A step of forming an incline segment **62** and forming curved corner segments **55** at the forward and rear ends of that segment is described below. That is, a step of forming a layer transition segment **54** to be formed in a first straight-line segment **56***a*, which is depicted in FIG. **11**, and forming a curved corner segment **55** between a second straight-line segment **56***c* and the first straight-line segment **56***a* and a curved corner segment **55** between a second straight-line segment **56***d* and the first straight-line segment **56***a*. And now, depiction regarding a step of forming a curved corner segment **55** between the second straight-line segment **56***c* and a first straight-line segment **56***b* and a curved corner segment **55** between the second straight-line segment **56***d* and the first straight-line segment **56***b* is omitted.

[0071] As depicted in FIG. **16**, the coil forming step S**110** includes a positioning step before pressing S**111**, a press work step S**112**, a positioning step before bending S**114**, a bend work step S**115**, a positioning step before bending S**116**, and a bend work step S**117**. And now, for convenience of description, up and down, front and back, and left and right directions are defined as depicted.

Positioning Step Before Pressing

[0072] As depicted in FIG. **16**(*a*), in the positioning step before pressing S**111**, place a linear portion **61** of a conductor **60** (rectangular wire) between a die **70***a* and a die **70***b*. Put the linear portion **60** of the conductor **60** extending in front and back directions. Position the conductor so that both the left and right side surfaces of the rectangular conductor will face the pressing surfaces of the left and right dice **70***a*, **70***b*, respectively. And now, the conductor **60** is supported so that it is allowed to move forward by feeding equipment which is not depicted; the conductor is moved forward by driving the feeding equipment and the conductor **60** can be positioned into place by stopping the feeding equipment.

Press Work Step

[0073] As depicted in FIG. **16**(*b*), in the press work step S**112**, place a linear portion **61** of a conductor **60** (rectangular wire) between a die **70***a* and a die **70***b*. Nip and press the left and right sides of the conductor **60** by the die **70***a* and the die **70***b* and plastically deform the conductor **60**, thereby forming an incline segment **62**. As depicted in FIG. **16**(*c*), the incline segment **62** is formed such that its both ends are flexed (bent) in a left and right direction at a predetermined angle to the linear portion **61** so that the linear portion **61** following the incline segment will shift by one pitch, i.e., by a horizontal width dimension of the conductor **60** with respect to the linear portion **61** preceding the incline segment.

Positioning Step Before Bending

[0074] As depicted in FIG. **16**(*d*), in the positioning step before bending S**114**, move the conductor **60** forward by a predetermined distance by the feeding equipment and position the conductor **60** so that a support rod **72** will be positioned around the forward end of the incline segment **62**. The conductor **60** is put on the support rod **72** and a roller **71** is placed over the conductor **60**. The support rod **72** and the roller **71** are placed such that their central axes extend in the left and right direction. The roller **71** is configured so that it can turn, centering on the support rod **72**.

Bend Work Step

[0075] As depicted in FIG. **16**(*e*), in the bend work step S**115**, move the roller **71** in such a manner as to loop the conductor **60** around the support rod **72**. That is, in the bend work step S**115**, turn the roller **71** forward and downward, centering on the support rod **7**, and press the roller **71** against the conductor **60** around the forward end of the incline segment **62**. Turn the roller **71**, taking an amount of spring back into account, and bend the conductor **60** downward over 90 degrees, thus forming a curved corner segment **55**. This enables it to form a stator coil **5** without swelled winding. After bending the conductor **60**, the roller **71** is turned in a reverse direction and returns to its home position.

Positioning Step Before Bending

[0076] As depicted in FIG. **16**(*f*), in the positioning step before bending S**116**, move the conductor **60** forward by a predetermined distance by the feeding equipment and position the conductor **60** so that the support rod **72** will be positioned around the rear end of the incline segment **62**.

Bend Work Step

[0077] As depicted in FIG. **16**(*g*), in the bend work step S**117**, move the roller **71** in such a manner as to loop the conductor **60** around the support rod **72**. That is, in the bend work step S**117**, turn the roller **71** forward and downward, centering on the support rod **72**, and press the roller **71** against the conductor **60** around the rear end of the incline segment **62**. As is the case for the bend word step S**115**, turn the roller **71**, taking an amount of spring back into account, and bend the conductor **60** downward over 90 degrees, thus forming a curved corner segment **55** (see FIG. **16**(*h*)). After bending the conductor **60**, the roller **71** is turned in a reverse direction and returns to its home position.

[0078] And now, although not depicted, a curved corner segment **55** between the second straight-line segment **56***c* and the first straight-line segment **56***b* and a curved corner segment **55** between the second straight-line segment **56***d* and the first straight-line segment **56***b* are each formed by positioning the conductor **60** by the feeding equipment and performing bending work by the roller **71** that turns, centering on the support rod **72** in the coil forming step S**110**. Positioning by the feeding equipment before bending work is performed so that the first straight-line segments **56***a*, **56***b* will become shorter than the second straight-line segments **56***c*, **56***d*.

[0079] The coil forming step S**110** is performed repeatedly, a winding part **50** that is made by being wound a plurality of times is formed, and connection terminals **52**, **53** are formed at both ends of the winding part **50** by a bend work step which is not depicted.

[0080] As above, by bending the conductor around the forward end and around the rear end of an incline segment **62** formed beforehand, respectively, in a direction (downward) perpendicular to the direction (left and right direction) in which both the ends of the incline segment **62** are bent, it is possible to form a stator coil in which a part of a layer transition segment **54** (incline segment **62**) is made by a part of a curved corner segment **55**, as described previously.

[0081] According to the first embodiment described above, positive effects set forth below are obtained.

[0082] (1) A stator coil **5** pertaining to the present embodiment is the stator coil that is wound by concentrated winding